Report and Recommendations for the Danish Red Cross on Potential Financing Mechanisms for the Care of Non-Communicable Disease (NCD) in Humanitarian Settings

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ACRONYMS

CeVD	Cerebrovascular disease
CVD	Cardiovascular disease
DM	Diabetes mellitus
HTN	Hypertension
IDP	Internally displaced persons
LMIC	Low-and-middle-income country
NCD	Non-communicable Disease
SDG	Sustainable Development Goals
UN	United Nations
UNHCR	UN High Commission for Refugees
WHO	World Health Organization

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INTRODUCTION AND OBJECTIVES

NCDs, or non-communicable diseases, are a group of long-term medical conditions that are not passed from person to person. NCDs are by far the leading cause of death and disability globally with the prevalence of these conditions increasing across all age groups and regions.[1] Most of the avoidable death and disability resulting from NCDs happens in low-and-middle-income countries (LMICs).[2]

The Danish Red Cross commissioned this report as part of the organization's efforts to address the growing threat of NCDs in fragile contexts and humanitarian crises. The Danish Red Cross's *International Strategy 2022-2025* commits the organization to advancing access to prevention, treatment, and support for people living with, or at risk of, NCD in humanitarian settings including through increasing the financing available for these efforts.

This report seeks to investigate the necessity and potential mechanisms for establishing an additional global financing mechanism for NCD care in humanitarian settings. The specific objectives of the report include:

- demonstrating the need for additional financing for NCD care in humanitarian contexts;
- examining the optimal ways to mobilize, structure, and allocate this additional funding to maximize impact; and
- exploring the potential roles and next best steps for the Danish Red Cross in facilitating this additional financing.

APPROACH

This report and its recommendations were developed using a two-phase approach including a desk review and expert panel discussion, as described below.

PHASE I – DESK REVIEW

ThinkWell carried out an extensive desk review to examine the necessity for extra funding for NCD care in humanitarian settings, evaluate the difficulties in financing and providing NCD care in these situations, and identify potential financing strategies that could help overcome these challenges.

The desk review examined various sources including: (i) relevant policy, strategy, and program documents from the Danish Red Cross, including the International Strategy (2022-2025) and operational guidelines for NCD care in humanitarian settings; (ii) academic literature, including peer-reviewed articles and research studies focused on the financing and delivery of NCD care in crisis-affected regions; and (iii) program literature and reports from other global, regional, and national stakeholders engaged in the financing or provision of NCD care in humanitarian contexts. For a complete list of referenced sources, please refer to the 'References' section on page 33.

Based on the desk review, a brief technical report was developed that detailed the key challenges in financing NCD care and presented a selection of six promising financing mechanisms that could potentially be applied to tackle the identified issues.

PHASE 2 – EXPERT PANEL DISCUSSION

Based on the findings of the desk review, ThinkWell facilitated an expert panel discussion with members selected from across the Danish Red Cross and ICRC for their prior experience in innovative financing, NCD programming, and humanitarian settings (n=7). The technical report and long list of financing mechanisms developed in Phase 1 were shared with the experts ahead of the panel discussion.

The expert panel was invited to reflect on: (i) the challenges facing the delivery of NCD care in humanitarian settings, (ii) the potential transferability of different types of additional financing mechanism(s) to address these challenges, and (iii) how best the Danish Red Cross might contribute to the realization of such financing mechanism(s).

The results of the desk review, as well as the feedback from the expert panel, were synthesized and used to develop the final recommendations presented in this report.

OVERVIEW

In Section 1, the key challenges identified in the desk review for the financing of NCD care in humanitarian settings are discussed in detail, together with a list of potential financing mechanism designs which address one or all of the key challenges.

In Section 2, the input and feedback of the expert panel on the key challenges, the design of a potential financing mechanism, and the role of the Danish Red Cross and its partners are discussed.

In Section 3, specific recommendations are presented for the management team of the Danish Red Cross based on the findings of the desk review and expert panel discussion.

Table 1: Key challenges for the financing of NCD care in humanitarian settings

SECTION 1: KEY CHALLENGES FOR THE FINANCING OF NCD CARE

KEY CHALLENGE 1: THE NEED FOR NCD FINANCING VARIES GREATLY FROM ONE HUMANITARIAN SETTING TO ANOTHER.

Humanitarian settings are characterized by complexity and vary significantly in terms of their precipitants, effects, and impacted populations. This variation makes it difficult to predict the financial needs for NCD care from one context to another, including not only the volume of financing required but the type of financing and the target beneficiaries.

The precipitants of humanitarian crises are extremely diverse, including a wide range of natural and man-made disasters which can occur with more or less warning. Natural disasters such as earthquakes, floods, and hurricanes can cause significant damage and displacement, while man-made disasters such as conflicts and wars can result in mass displacement of populations and widespread human rights violations. In addition, some crises may be caused by a combination of natural and man-made factors, such as climate change, which can exacerbate the impacts of natural disasters and create additional challenges for affected populations.

Humanitarian crises can also overlap in unpredictable ways and can change rapidly, often with little warning. For example, a protracted conflict may escalate suddenly, leading to a mass displacement of people who were previously living in relative safety. Alternatively, a natural disaster may trigger a secondary crisis, such as a disease outbreak or disruption of healthcare services, leading to further challenges for the affected population.

The challenges facing the delivery of NCD care in humanitarian settings, and the financing required to address these, are thus at the same time significant, variable, and unpredictable. Factors such as the type and duration of displacement, access to healthcare, and availability of resources can interact in complex ways, requiring a nuanced and adaptable approach to NCD financing in the humanitarian response (Table 2, overleaf).

Table 2: Dimensions of humanitarian crises and their implications for NCD financing

Dimension	Description	Implications for NCD financing
Number of people impacted	The number of people impacted in a crisis setting can vary widely, from localized emergencies like hurricanes and earthquakes to widespread risks like climate change and protracted wars.	Crises that impact larger numbers of people may require greater amounts of NCD financing.
Duration of the crisis	The length of time that a population has been affected by a crisis can range from acute, in the immediate aftermath of a natural disaster, to chronic, in situations of protracted conflict or displacement.	In shorter-term emergencies, funding priorities may include the supply of essential life-saving commodities (like insulin), in the longer-term, funding priorities may include more general health systems strengthening.
Type of displacement	People affected by a crisis may be refugees who have crossed an international border, are internally displaced within their own country, or have remained in their original location despite the crisis.	The channels, conduits, and recipient organizations for NCD financing will vary according to the origin and location of beneficiaries.
Access to healthcare	People affected by a crisis may access healthcare in temporary facilities (for instance, in camps) or through national health systems that may be more or less impacted by the humanitarian situation.	In contexts with limited healthcare delivery capacity, more funding may be required for infrastructure, utilities, and other cross-cutting needs, while in contexts with better-functioning health systems, 'top-up' financing may be better suited.
Availability of resources	The availability of resources in a humanitarian context can vary significantly based on factors such as the income level of the population affected by the crisis, the severity of the crisis, and the level of support from the international community.	The level of external funding required to support NCD service delivery will depend in part on the baseline level of resources among the impacted population(s).

IMPLICATIONS FOR FUND DESIGN

• Additional financing for NCD should be flexible in terms of the type, amount, and duration of funding available. This flexibility could be achieved by the establishment of one mechanism with a combination of financing types available, or from a combination of financing mechanisms each with separate approaches to funding.

KEY CHALLENGE 2: THE FINANCING AVAILABLE FOR NCD CARE IN HUMANITARIAN SETTINGS IS INSUFFICIENT AND NOT PROPORTIONATE TO THE BURDEN.

Overview of NCD financing

There are two possible sources of funding for NCD care in humanitarian settings: domestic financing, which originates from inside the crisis-affected country, and external financing, that which originates from outside. The availability, relative contribution, and importance of either financing source vary according to the type of humanitarian crises at play, the location and level of displacement of the affected population, and the pre-existing level of funding within the supporting healthcare system.

Because of methodological limitations in the way that funding for NCD care is tracked and reported, it is difficult to quantify the level of financing available and to compare how financing varies across different humanitarian contexts. To track expenditures on NCD effectively, the budgets and financial reports of governments, donors, and other funders, can be examined to identify unambiguously NCD-related costs. For example, expenses associated with a national Ministry of Health's NCD prevention and control program can reasonably be flagged and tracked as NCD-related. However, effective NCD care relies on robust primary healthcare systems, including essential equipment, infrastructure, and primary care staff, the costs of which are challenging to attribute to a single disease or condition.

There are few high-quality projections of the financial requirements for NCD care in humanitarian settings, but economic modeling from LMIC contexts suggests that modest investments could lead to significant improvements in the coverage of NCD services. Estimates suggest, for instance, that implementing the WHO's recommended population-level interventions for NCDs would cost less than $0.20 per capita per year in low-income countries and less than $0.50 in middle-income countries.[3,4] If these interventions were scaled up to cover 80% of the population in all LMICs, the cost would be approximately $11.4 billion. This represents less than 5% of current annual health expenditure in these settings.[5,6]

External financing for NCD care in humanitarian settings

Despite their outsized contribution to death and disability in LMICs, NCDs receive a relatively small proportion of external financing, or development assistance for health (DAH). Over the past two decades, for instance, the proportion of DAH allocated to NCD has been relatively stable at between 1-2% even though these conditions account for >70% of deaths in such settings.[7]

The calculation method for DAH for NCD may underestimate actual allocations toward NCD care, yet even the most optimistic projections suggest it would remain a small fraction of the total DAH. This underestimation is likely because, while NCD-specific development assistance has designated accounting codes, a significant portion of funding supporting NCD service delivery may fall under more general categories, such as "health sector support" or "health systems strengthening". Some authors estimate that DAH for NCD underestimates actual allocations by a factor of three, though even in these scenarios DAH for NCD would comprise no more than 3.25% of the total.[8]

The mismatch between funding and burden is particularly stark when funding for NCD is compared to that for other health priorities, including HIV/AIDS, tuberculosis (TB), and other infectious diseases. In 2019, for instance, just one financing institution - the Global Fund - allocated $3,117 million in financing for infectious diseases, dwarfing the $733 million spent by all donors on NCDs in the same year.[9] In recent years, almost half of DAH has been allocated for HIV/AIDS care, despite it accounting for 3.7% of the disease burden.[10]

Of the DAH specifically allocated to NCD, two funder groups – notably, private philanthropists and bilateral investors - were the largest contributors responsible for >80% of all funding.[11] The Gates Foundation (10% of DAH for NCD), the US government (8%), and the UK government (8%) were the largest individual contributors in 2019, the most recent year for which data are available.[11] These three actors have been the largest contributors to NCD-focussed DAH since at least 2017.[3]

The first dedicated global external financing mechanism for NCD, the UN Multi-partner Trust Fund (MPTF), was established in 2021, but at the time of writing this report, it had received no contributions.[12,13] The MPTF aims in the first instance to mobilize at least USD 250 million for disbursement over five years, but it is as yet unclear how much of this funding will be allocated toward NCD care in humanitarian settings, nor how the MPTF will be operationalized.

The lack of an operational global financing mechanism for NCD care is in stark contrast to the situation for communicable diseases, which have several dedicated funding sources. Infectious-disease-focused funds such as the Global Fund to Fight AIDS, Tuberculosis and Malaria; Gavi, the Vaccine Alliance; and the World Bank's Pandemic Emergency Financing Facility and others have successfully mobilized and allocated significant financial resources to combat communicable diseases, with a significant proportion of this funding going to fragile or conflict-affected states. The absence of similar funding mechanisms for NCD care highlights a significant disparity in the global health financing landscape and underscores the need for increased investment and attention to these conditions.

Domestic financing for NCD care in humanitarian settings

Domestic financing is the main source of funding for NCD care in the low-and-middle-income countries most affected by humanitarian crises. This form of financing plays a crucial role in providing NCD care in humanitarian settings, as an increasing number of individuals affected by such crises access healthcare through routine primary healthcare systems, such as those found in urban centers, rather than temporary healthcare infrastructure like refugee camp clinics.[14,15]

Domestic financing for NCD care can come from pre-pooled sources, like medical insurance schemes, or they can come in the form of out-of-pocket payments, charged to people seeking healthcare as and when costs arise. Out-of-pocket expenditures (OOPE) are generally considered less equitable than pre-pooled financing, as they place a disproportionate financial burden on economically disadvantaged individuals and often lead to catastrophic health costs.

In the context of NCD care, high treatment expenses can quickly become overwhelming for patients relying on OOPE with evidence showing that crises-affected populations are vulnerable to catastrophic healthcare costs. One study from Jordan, for instance, demonstrated that over half of the Syrian refugees that reported not seeking care for their NCD did so because of cost barriers.[16] In Lebanon, in a survey of refugees living with chronic illness, 79% reported that they could not afford user fees.[17] Similarly, in Ukraine a cross-sectional survey of IDPs living with diabetes reported that cost was the most common reason participants cited for being unable to see a doctor or for experiencing an interruption in their medication.[18]

Pre-pooled financing for NCD care, provided through insurance schemes or direct government funding, can reduce the risk of catastrophic healthcare costs, but is often not available to crisis-affected populations. One reason for the limited availability of pre-pooled schemes is that the baseline coverage and actuarial benefit of health insurance schemes are generally low in LMICs where the bulk of crisis-affected populations live. Additionally, displaced and refugee populations often face administrative and eligibility barriers to coverage under these schemes. For instance, displaced and refugee populations may not be eligible for coverage due to their status as non-citizens, their lack of

formal residency, or because they cannot access official identification documents which they frequently lack due to loss during transit, or the inability to obtain new ones in their host location.

IMPLICATION(S) FOR FUND DESIGN

• Private philanthropy and bilateral investors currently dominate external sources of NCD financing. Additional financing mechanisms should aim to broaden and diversify the pool of funding sources available for NCDs.

• When considering the creation of a new financing mechanism, it will be important to examine the operational plans and investment priorities of the MPTF, to ensure complementarity, as well as to gain insight into the reasons for its under subscription, in order to inform and improve future advocacy and resource mobilization efforts.

• Given the importance of domestic financing to NCD care in humanitarian settings, opportunities to leverage a financing mechanism to incentivize increased domestic financing, particularly that derived from more equitable pre-pooling mechanisms, should be explored

KEY CHALLENGE 3: THERE IS A LACK OF EVIDENCE TO INFORM THE PRIORITIZATION OF THE LIMITED FINANCIAL RESOURCES THAT ARE AVAILABLE

There is a scarcity of data on the risk, burden, and impacts of NCD in humanitarian settings, which makes it difficult to prioritize the allocation of the limited resources that are available. A majority of existing data originates from small-scale studies whose findings are difficult to generalize to larger populations. The diversity in humanitarian settings, encompassing a wide range of populations affected by crises, further complicates the generalization of results from these small-scale studies.

Despite the limited data available, a wide variation in NCD prevalence and risk across humanitarian contexts is evident. This variation can be attributed to the diverse populations affected by crises, as well as differences in pre-crisis risks, age distribution, and disease burdens. A systematic review of whole-population surveys in humanitarian crises across a range of high-income (HIC) and LMIC settings, for instance, found that the prevalence of high blood pressure ranges from 3% to 83.14% of crisis-impacted populations.[19]

Further, variation in the burden of disease can be marked even within the same impacted population. For instance, among displaced Syrian populations, the prevalence of diabetes was as low as 0.8% among child refugees in Iraqi camps[20] and as high as 47% among older, longer-term Syrian displaced persons in Lebanon.[21] Similarly, for Palestinian refugees aged 40 years and above the prevalence of hypertension ranged from 13.8% for those based in Jordan[22] to 29.7% for those based in Lebanon.[23]

In addition to the lack of evidence on the epidemiology of NCD and NCD risk, there is a dearth of evidence on which interventions work in humanitarian settings, for whom, and at what cost. Although there is strong evidence on the general cost-effectiveness of select interventions for NCD control and management, including, for instance, tobacco control measures, hypertension management, and diabetes prevention programs, there is little implementation research that suggests how these strategies are best deployed in humanitarian settings where health systems are more or less disrupted.

One challenge in gathering evidence for effective NCD interventions in humanitarian settings is the constantly evolving nature of these contexts, which often presents unique barriers to implementation and evaluation. Factors such as population displacement, limited access to healthcare facilities, and the strain on existing health systems can hinder the successful adaptation and scaling of evidence-based interventions that have proven successful in more stable settings. Additionally, the diverse range of humanitarian settings, from refugee camps to disaster-affected areas, further complicates the identification of universally applicable interventions and strategies.

Moreover, research funding and prioritization in humanitarian contexts have traditionally focused on addressing immediate life-threatening issues, such as infectious diseases, malnutrition, and acute injuries, which can overshadow the growing burden of NCDs. This has led to a relative neglect of implementation research on NCD interventions in these settings. To address this gap, it is crucial to invest in robust research and evaluation efforts that can inform the development and adaptation of effective, context-specific NCD interventions and policies for humanitarian settings, ensuring that the affected populations receive the essential care they require.

IMPLICATIONS FOR FUND DESIGN

• To better inform funding decisions and improve the effectiveness of NCD interventions, it is crucial to invest in comprehensive data collection and research efforts in humanitarian settings. This will help identify the most pressing NCD-related needs, assess the feasibility of implementing evidence-based interventions and monitor their impact in these complex environments.

KEY CHALLENGE 4: THE PRIMARY HEALTHCARE SYSTEMS ESSENTIAL FOR NCD CARE ARE MORE OR LESS DISRUPTED IN HUMANITARIAN SETTINGS

Strong primary healthcare systems are essential for managing NCDs in humanitarian settings. NCDs typically demand long-term management and life-long treatment, which necessitates continuous healthcare support and access to medications. Moreover, numerous NCDs share common risk factors and can co-occur in individuals, requiring an integrated and life-course approach to care. Primary care serves a critical function in the early detection, prevention, and ongoing monitoring of NCDs, making it a fundamental component in ensuring the overall well-being of affected individuals.

For NCDs, the costs tend to increase, and the cost-effectiveness tends to decrease, the later in the disease pathway that care is delivered (Figure 1, overleaf). In general, the costs of preventing NCDs are much lower than the costs of managing the downstream complications of NCDs. Good care for NCDs, therefore, includes both a prevention and a management component, even more so in resource-limited settings where cost efficiency is particularly important. Community-engagement and primary care are essential to reach people before they require hospital-level care.

Equitable and early access to good care is not only essential for improving health and reducing the suffering of people living with NCD, but it also has a direct positive impacts on individual economic productivity and quality of life.[24,25] Evidence from low-and-middle-income countries shows that individuals living with NCDs are at a greatly increased risk of being driven into poverty, either through the burden of treating the costly complications of NCD, like kidney failure or blindness or from reduced earning potential from disabilities and workplace absenteeism.[26]

NCDs usually develop in the presence of one or more lifestyle risks, with the main drivers being tobacco use, physical inactivity, overweight and obesity, and the harmful use of alcohol.[27] Efforts to reduce the prevalence of these lifestyle risks among the population are therefore an important component of NCD care as they help to reduce the overall prevalence of NCD in a given population. The WHO recommendations for NCD control suggest that structural interventions, like increased taxation on tobacco and alcohol are the most cost-effective methods for addressing lifestyle risks, though brief interventions to reduce risk by primary care providers can also be cost-effective.[5]

NCDs tend to have no symptoms at all in the early stages with most symptoms occurring once the irreversible damage has already been caused. Because they are mostly 'silent' conditions with limited or no physical symptoms, the diagnosis and ongoing monitoring of NCDs depends on the availability of simple point-of-care clinical tests like blood pressure measurement, urinalysis, and blood glucose ('finger prick') testing.

Because of their shared risk factors, multiple NCDs often develop in the same person. Up to 75% of people living with type 2 diabetes also suffer from high blood pressure, for instance.[28] For this reason, comprehensive and holistic models of care – where multiple diseases and risk factors can be addressed at one care point, or in one consultation - are particularly important for people living with NCD.

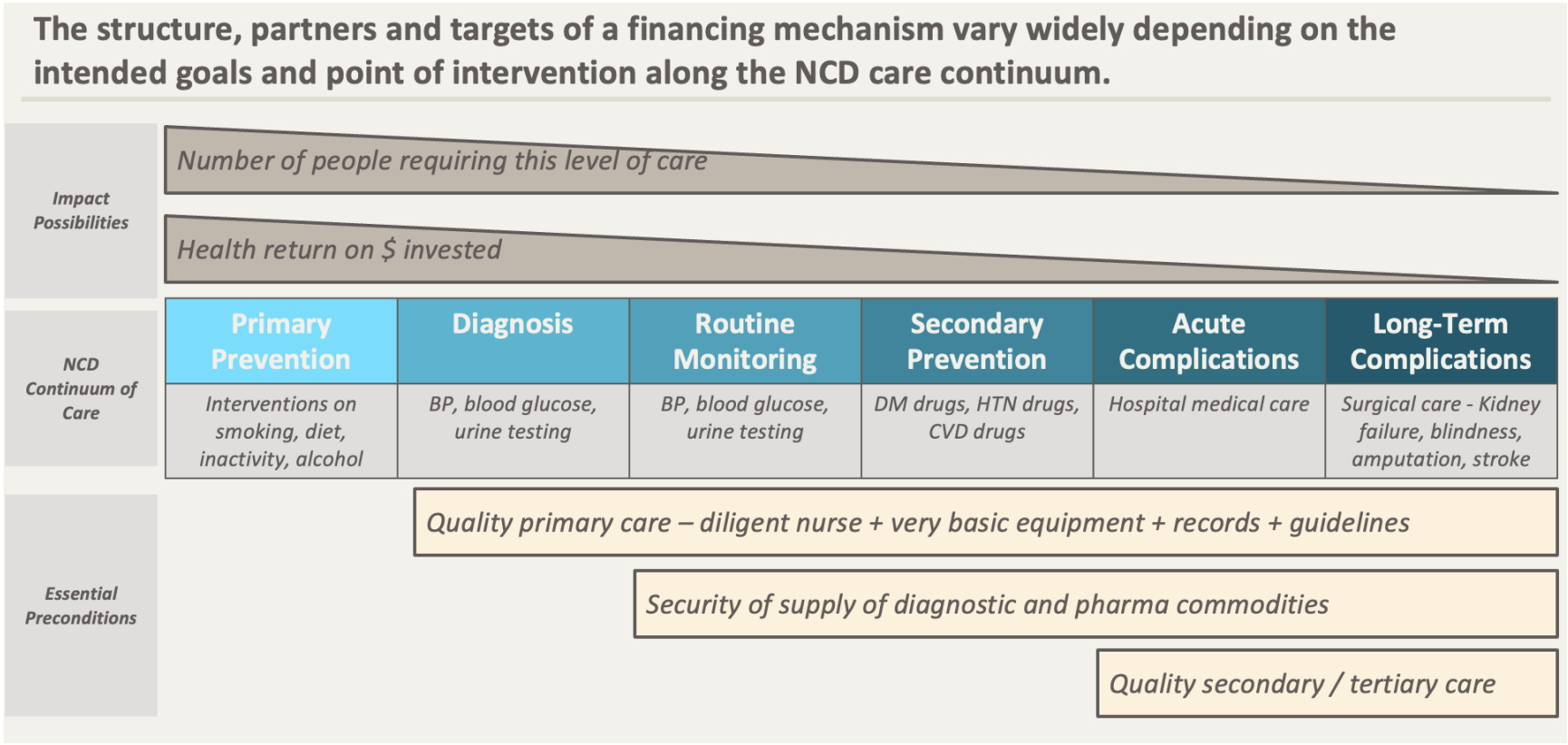
Treatment for NCDs is usually lifelong, with patients requiring ongoing access to medications, disease monitoring, and follow-up. Unlike episodic, acute conditions like pneumonia or diarrhea which can be managed with 'once-off' consultation and prescriptions, good care for NCDs requires sustained investments by the health system in the form of daily medications, life-long follow-up appointments, and longitudinal medical record systems which can be updated over months or years. The lifelong nature of these conditions is a key reason for why NCDs have a greater negative economic impact on households than communicable disease.[29]

The bulk of NCD care, including diagnosis, treatment initiation, and monitoring can be performed at the primary care level by nurses and other non-physician cadres.[30–33] Robust and high-quality primary care services, as well as well-trained and supported primary care staff, are an essential precondition for good quality NCD care, including in humanitarian settings.

IMPLICATIONS FOR FUND DESIGN

- The financing mechanism should be designed in such a way that supports implementing partners to strengthen primary care systems. This may require anticipatory investments, rather than reactive investments in response to specific emergencies.
- The financing mechanism should be designed to support ongoing prevention efforts over a long period of time and with an understanding that the benefits of prevention efforts may not be seen immediately.

Figure 1: The possibilities for impact, costs, and essential preconditions for good quality NCD care along the disease continuum.



KEY CHALLENGE 5: ESSENTIAL INPUTS FOR NCD, INCLUDING PHARMACEUTICALS AND DIAGNOSTICS ARE MORE EXPENSIVE THAN THEY NEED TO BE

A lack of harmonized guidelines for NCD management across humanitarian settings leads to stakeholders using different drug regimens and diagnostic tools, which ultimately fragments demand. This fragmentation can result in higher prices for essential inputs, as individual buyers may lack the negotiating power to secure lower costs. Ensuring the implementation of standardized treatment protocols and diagnostic approaches can help consolidate demand and enable stakeholders to collectively leverage their purchasing power, ultimately driving down prices for essential NCD inputs.

Inefficient procurement practices for NCD commodities further exacerbate the challenge of high costs for essential inputs in NCD care. Fragmented procurement processes and a lack of transparency can lead to higher prices and supply chain inefficiencies. By streamlining procurement practices and implementing centralized purchasing systems, stakeholders can increase efficiency, reduce duplication, and lower costs for essential NCD inputs, such as pharmaceuticals and diagnostics.

Market failures in the NCD commodities sector contribute to the high costs of essential inputs for NCD care. For example, limited competition among suppliers can result in monopolistic or oligopolistic market structures, where a small number of companies control the market and can set high prices. Additionally, weak regulatory environments may allow for the proliferation of counterfeit or substandard products, further complicating the market landscape. Addressing these market failures through policy interventions and regulatory enforcement can help ensure a more competitive and transparent market, ultimately lowering the costs of essential NCD inputs.

The global supply chain for NCD commodities is also riddled with inefficiencies, contributing to higher costs for essential inputs. Issues such as transportation delays, stockouts, and a lack of accurate demand forecasting can lead to increased costs and limited access to necessary pharmaceuticals and diagnostics. By investing in robust supply chain management systems and capacity building, stakeholders can improve the efficiency and reliability of the supply chain, ultimately reducing costs and ensuring the availability of essential NCD inputs.

Finally, limited investment in research and development for NCD-related technologies and treatments can hinder the development of more affordable and accessible solutions. As a result, the market may be dominated by a limited range of expensive products that are not well-suited for low-resource settings. Encouraging innovation and investment in the development of cost-effective NCD treatments and diagnostics can help create a more diverse market and enable greater access to affordable essential inputs for NCD care.

IMPLICATIONS FOR FUND DESIGN

- Financing the development and implementation of standardized treatment protocols and guidelines could help to consolidate demand and enable stakeholders to leverage their purchasing power collectively. By doing so, it is possible to drive down the prices of essential NCD inputs, such as pharmaceuticals and diagnostics, which could help ensure affordability and accessibility for people in low-resource settings
- Encouraging investment in research and development for NCD-related technologies and treatments could be a possible consideration in the financing mechanism. By doing so, a more diverse market could be created, and greater access to affordable essential inputs for NCD care could be enabled.

LONG LIST OF FINANCING MECHANISMS

Six financing mechanisms with potential transferability to the financing of NCD care in humanitarian settings were selected based on the findings of the desk review. The rationale for their selection, including how the proposed financing mechanism might address the key challenges identified in the desk review, are highlighted in Table 3 below.

For each of the long-listed financing mechanisms, an 'archetype' has been selected for the purposes of illustration. For instance, for the 'multilateral pooled financing' mechanism, the selected archetype is The Global Fund for AIDS, TB, and Malaria. Short narratives highlighting the key features of each financing mechanism archetype – including the purpose, main funders, financing approaches, and financing results – are described and summarized in Annex 1 (page 26).

Table 3: Long-listed financing mechanisms, illustrative archetypes, and target geography

Long-Listed Financing Mechanism	Rationale for selection	Illustrative Archetype	Target geography of archetype
1. Multilateral pooled fund	By pooling resources from various donors, a multilateral pooled fund can address the challenge of insufficient and disproportionate financing for NCD care in humanitarian settings. It ensures a more coordinated approach to funding allocation, enabling a more proportionate response to the burden of NCDs.	The Global Fund for AIDS, Tuberculosis, and Malaria (GFATM)	Global; low and lower-middle-income countries
2. Performance-based financing (PBF)	PBF can help tackle the varying needs of NCD financing in different humanitarian settings and the limited evidence for prioritization by incentivizing healthcare providers to deliver quality NCD care based on predefined performance metrics. This approach allows for better prioritization and allocation of financial resources, as well as flexible adaptation to the diverse needs of different humanitarian settings.	PDSS – Le Projet de Développement du Système de Santé)	Democratic Republic of Congo
3. Public-private investment partnership	This financing mechanism can address the disruption of primary healthcare systems in humanitarian settings by leveraging private sector resources and expertise. By collaborating with private entities, public institutions can improve the delivery of NCD care and rebuild disrupted health systems more effectively.	The Integrated NCD-Humanitarian Response	Jordan
4. Market-shaping fund	A market-shaping fund can help overcome the challenge of expensive essential NCD inputs, such as pharmaceuticals and diagnostics, by providing targeted financing to lower their cost. By pooling demand and negotiating better prices, this fund can make critical supplies more affordable and accessible in humanitarian settings.	Medicines for Malaria Venture (MMV)	Global

Long-Listed Financing Mechanism	Rationale for selection	Illustrative Archetype	Target geography of archetype
5. Development impact bond (DIB)	DIBs can address the challenge of limited evidence for prioritization by tying financial returns to the achievement of predefined, measurable outcomes in NCD care. This mechanism encourages evidence-based interventions and fosters innovation by prioritizing interventions that deliver proven results, leading to more efficient use of financial resources.	ICRC's Programme for Humanitarian Impact Investment (PHII)	Mali, Nigeria, Democratic Republic of Congo
6. Seed funding	Seed funding can help tackle the varying needs of NCD financing in different humanitarian settings and the disruption of primary healthcare systems by providing initial financial support to pilot innovative NCD care programs. This enables the identification of best practices and successful models that can be scaled up and adapted to strengthen primary healthcare systems and address varying needs across settings.	Grand Challenges Canada – Global Mental Health	Global; low and lower-middle-income countries

SECTION 2: SUMMARY OF THE EXPERT PANEL DISCUSSION

Overview

The expert panel was invited to reflect on three main areas: (i) the challenges facing the delivery of NCD care in humanitarian settings, (ii) the potential transferability of different types of additional financing mechanism(s) to address these challenges, and (iii) how best the Danish Red Cross might contribute to the realization of such financing mechanism(s).

The main discussion points and issues raised in each part of the discussion are provided below.

Part 1 – Addressing the challenges in financing and delivering NCD care in humanitarian settings

Insufficient financing and investment

The panel concurred that financing for NCD care in humanitarian settings is inadequate, necessitating increased investment from both external and domestic sources. One expert illustrated this by stating that even if the entire budget of the Danish Red Cross were allocated to NCD care, it would still be insufficient.

Role of host governments and pre-crises investment

The panel highlighted the crucial role that partner host governments play in providing NCD services in many humanitarian settings. They noted that pre-crises investment and resource allocation for NCD services and primary care greatly influence a health system's ability to support affected populations during a crisis. However, the panel also recognized that in conflict-affected areas, some governments may not be able to provide even basic healthcare services due to the ongoing instability and conflict, and NCDs may not be prioritized as a result. To address this, the panel stressed the need for international organizations and non-governmental organizations (NGOs) to work with local health partners to provide NCD services and support primary care. F

Importance of data and evidence for resource mobilization

The panel emphasized the value of data on the effectiveness and cost-effectiveness of NCD interventions in different settings for resource mobilization and establishing the 'investment case' for NCD care in humanitarian contexts. The panel also acknowledged the lack of evidence on the risks, burdens, and impacts of NCDs across humanitarian settings as a barrier to resource mobilization and prioritization of limited resources.

Potential Danish Red Cross Contributions

The panel identified health system strengthening and capacity building, as well as evidence generation, as some areas where the Red Cross could contribute. The panel acknowledged that the ability of the Danish Red Cross to contribute to these areas is dependent on the capacities of partner national societies.

During the panel discussion, it was mentioned that the Danish Red Cross may face some challenges in leading market-shaping interventions for NCD commodities, due to limited technical capabilities and networks in this area.

Part 2 - Evaluating the potential transferability of financing mechanisms to address identified challenges

Insufficient evidence for financing mechanism selection

Due to the lack of evidence on effective strategies in different humanitarian settings and the absence of specific objectives for the financing mechanism, the panel could not shortlist financing mechanisms for further exploration.

Need for flexible financing

The panel agreed on the importance of flexible financing, incorporating both long-term, anticipatory investments in health system strengthening (particularly at the primary care level) and short-term, reactive funding for rapid crisis response.

'Seed' or 'pilot' funding for evidence generation

The panel suggested that establishing or mobilizing a small amount of funding for pilot projects could help address some of the evidence gaps identified during the desk review.

Part 3 – The Danish Red Cross's role in facilitating additional financing for NCD care

Resource mobilization and research dissemination

The panel recognized the Danish Red Cross's role in mobilizing resources and promoting pragmatic research that has real-world implications and can be easily accessed by health policymakers and decision-makers.

Technical and financial resource requirements

The panel acknowledged that the Danish Red Cross's involvement in fundraising, advocacy, fund management, or implementation necessitates additional technical and financial resources.

Leveraging partnerships and networks

The panel noted that many stakeholders within the Danish Red Cross's existing partnerships and networks possess valuable expertise and insights for NCD financing. They emphasized the importance of building and leveraging partnerships across the RCRC Movement, partner governments, academia, and civil society to augment the Danish Red Cross's capabilities.

SECTION 3: RECOMMENDATIONS

The desk review and expert panel discussion underscore the urgent need to mobilize additional financing to address the escalating burden of NCDs in humanitarian settings as well as the potentially significant role that the Danish Red Cross could play in realizing this financing.

The Expert Panel therefore recommends that the Management Team of the Danish Red Cross should:

1: Establish a dedicated task team to lead and coordinate the operational, technical, and managerial activities required to support the Danish Red Cross's involvement in facilitating additional financing.

This task team should be drawn from multiple technical areas and business units, including those involved in healthcare, financing, operations, and humanitarian response. The task team should have a direct reporting line and frequent engagement with the Danish Red Cross management team to enable the necessary executive decisions and input on strategic choices.

The task team could support the Management Team by conducting research and analysis on the key questions related to the proposed financing, developing a clear action plan and road map, and exploring partnerships and collaborations with other organizations to enhance the organization's capacity and expertise. Additionally, the Task Team could facilitate regular communication and coordination with all stakeholders involved in the proposed additional financing mechanism.

2. Establish clear ambitions for the Danish Red Cross's involvement in the facilitation of additional financing.

To establish clear objectives for the Danish Red Cross's involvement, several questions need to be addressed (see below). In order to set clear objectives, the following questions need to be answered

a) **What specific aspects of NCD care and which geographical areas do we intend to finance?** Answering this question will help to define the scope of the organization's involvement and guide strategic planning and resource allocation efforts.
b) **What is the role of the Danish Red Cross in facilitating this additional financing?** Defining the organization's role will help all internal stakeholders understand the scope of their involvement and guide the organization's strategic planning and resource allocation efforts.
c) **Which additional resources, capabilities, or expertise would the Danish Red Cross require to perform in the intended role?** Systematically identifying these needs will enable the organization to address any gaps in capacity.
d) **Where would these additional resources come from?** Exploring potential sources of resources will help the organization plan for and secure the necessary funding, expertise, and support required.
e) **Within the Danish Red Cross, who will be responsible for leading the organization's involvement in facilitating additional financing?** Assigning clear responsibilities will ensure accountability and effective leadership in the organization's efforts to facilitate additional financing.

3. Continue to build and cultivate partnerships with stakeholders within and beyond the RCRC Movement with expertise in innovative financing.

The proposed task team could take the lead on identifying potential partners and act as a conduit for communication between the Danish Red Cross and these partners. To facilitate practical engagement, the task force should identify working groups, coordination forums, and other platforms where priority partners exchange ideas and lessons learned on innovative financing. Active participation in these discussions will allow the Danish Red Cross to remain informed and contribute to the discourse.

These strategic partnerships will provide the Danish Red Cross access to crucial insights, expertise, and resources, ultimately bolstering the efficacy of any additional financing. Some of the important partnerships for the exploration and facilitation of additional NCD financing are outlined below.

Partner	Rationale
ICRC	The ICRC has previous experience in designing and deploying innovative financing mechanisms to support health interventions in humanitarian settings (as outlined in the long-listed financing mechanisms) and is conducting a strategy scoping exercise to explore further opportunities in this space. Partnering with the ICRC would enable the Danish Red Cross to leverage their expertise and experience, potentially expediting the development and implementation of effective financing solutions
IFRC	The IFRC partnered with the Islamic Development Bank to launch an innovative financing mechanism to combat cholera and other diarrheal diseases. By collaborating with the IFRC, the Danish Red Cross could gain insights into the successes and challenges faced in developing such mechanisms, thereby enhancing their own approach to combating NCDs and other health issues.
National Societies	The Danish Red Cross has strong existing relationships with national societies, including many joint programs which include an NCD care component (e.g. 'Continuity in Crisis'). Strengthening these partnerships would facilitate knowledge exchange and enable the Danish Red Cross to capitalize on shared experiences, fostering more comprehensive and efficient solutions for NCD care across various contexts.

4. Establish a pragmatic program of evidence generation to support resource mobilization, prioritization decisions, and the investment case for NCD financing.

Creating a systematic program of evidence generation is crucial for the Danish Red Cross and its partners in order to pinpoint the most significant investment areas for supplementary financing mechanisms. This practical program should be guided by a well-defined action plan and allocated sufficient resources to ensure its success. A solid evidence base will empower the Danish Red Cross to make well-informed decisions and effectively advocate for increased financing in NCD care.

The Danish Red Cross can capitalize on existing partnerships with academic institutions and other national societies to facilitate collaborative research and knowledge sharing. These collaborations can foster the development of innovative financing mechanisms and provide valuable insights into the effectiveness of various NCD care initiatives. One such example is the Danish Red Cross's "Continuity in Crisis" project, which demonstrates the potential benefits of partnership-driven research and evidence generation.

5. Continue to use the Danish Red Cross's convening and advocacy power to promote and advocate for increased financing for NCD care, including through the integration of NCD outcomes in existing financing mechanisms.

By employing its existing influence and networks, the Danish Red Cross can raise awareness and mobilize support for additional NCD financing. Advocacy efforts should be aligned to the action plan developed by the task team and could include activities such as:

- **Organizing forums and roundtable discussions**: Invite key stakeholders, including government representatives, donors, NGOs, and private sector partners, to engage in dialogue, share best practices, and explore innovative financing options for NCD care.
- **Developing targeted advocacy campaigns**: Design and implement communication strategies that highlight the urgent need for NCD financing, using data and evidence-based research to illustrate the potential impact of increased investment in NCD care
- **Engaging with policymakers**: Actively participate in policy discussions and engage with decision-makers to advocate for the integration of NCD outcomes into existing financing mechanisms, emphasizing the potential long-term benefits and cost-effectiveness of such measures, as informed by the program of evidence generation developed under Recommendation 5.

ANNEX: NARRATIVE SUMMARIES OF LONG-LISTED FINANCING MECHANISMS

Mechanism 1: Multilateral pooled fund

Archetype: The Global Fund for AIDS, TB, and Malaria (GFATM)

Question	Description
What is the purpose of the financing mechanism?	The Global Fund's mission is to attract, leverage, and invest resources to end the epidemics of AIDS, tuberculosis and malaria and to help communities and countries reach their own goals. The organization provides financial resources, technical assistance and other support to countries and communities affected by the diseases, with the goal of strengthening health systems and reducing the transmission and impact of the diseases. The Global Fund also works closely with partners in the public and private sectors to ensure that its efforts are integrated with other programs and initiatives aimed at improving global health.
What is the size of the financing mechanism?	$5,540 million since 2002
Where does the funding come from?	A variety of sources contribute to GFATM funding. Governments provide 70% of funding; private sector companies provide 15%; foundations, individual donors and other sources made up the remaining 15%.
Who is responsible for managing the financing mechanism?	At a central level: GFATM is overseen by a Board of Directors, which is responsible for overseeing the organization's strategy, operations, and finances. The Board of Directors is made up of representatives from donor and implementing countries, as well as representatives from the private sector, civil society, and communities affected by the diseases the Global Fund aims to combat (AIDS, tuberculosis, and malaria). At a local-level: Country-Coordinating Mechanisms (CCMs) oversee grants within their own country. CCMs include representation from Government, civil society and the private sector.
Who are the implementing entities for the financing mechanism?	Implementing entities in all low and lower-middle income countries are eligible. The scale and conditionality of financing depends on the disease burden. The bulk of GFATM funding is given to Principal Recipients which are implementing entities selected by the CCM to oversee the disbursement of grants to smaller entities, known as sub-recipients.

	Implementing agencies can be Governments, typically Ministries of Health, civil society organization, non-government organizations (NGOs) and private sector enterprises.
What types and terms of financing are made available through the mechanism?	GFATM issues a combination of grants, low-interest loans, and risk-sharing instruments. Most funding is made in the form of grants in response to submissions made by CCMs. Smaller amounts of funding are made available for non-CCM strategic initiatives and catalytic financing for breakthrough technologies and innovations.
What are other key features of the financing mechanism?	GFATM has co-financing requirements and incentives. At least 15% of a country's allocation is a co-financing incentive made available if countries make and eventually realize additional domestic commitments over the grant implementation period.
What are other key features of the financing mechanism?	In addition to working closely with and through Governments, the GFATM has a proactive engagement strategy for the private sector and civil society organization with both constituencies allocated seats on the Governing Board.

Mechanism 2: Performance-based Financing

Archetype: The Health System Strengthening for Better Maternal and Child Health Result Project (PDSS – Le Projet de Développement du Système de Santé)

Question	Description
What is the purpose of the financing mechanism?	To improve the availability, utilization and quality of a package of maternal and child health services across 11 districts in the DRC.
Where does the funding come from?	World Bank Group. Funding issued in a mix of grants and concessionary loans.
What is the size of the financing mechanism?	$714 million since 2016
Who is responsible for managing the financing mechanism?	At a central level: The World Bank oversees financing through a Project Management Office. Financing flows to implementing entities through the Congolese Ministry of Finance and Ministry of Health. At a local level: The implementation of the program involved a multi-layered system of supervision, verification, and counterverification. Quantity indicators were reported by each contracted health facility and verified by provincial purchasing agencies, through

	review of facility registries and tracing of patients in a community verification exercise. Quality indicators were verified by health zone and provincial teams by completion of the quality checklists in health centers and hospitals.
Who are the implementing entities for the financing mechanism?	Public or private healthcare providers operating in any of 11 districts in the DRC.
What types and terms of financing are made available through the mechanism?	The financing each contracted provider received through the intervention was approximately $1.6 USD per capita per year. Contracted health facilities receive quarterly payments conditional on the volumes of targeted services provided and on quality of care. Quantity bonuses were provided on a fee-for-service basis, for the provision of a package of preventive and curative services with a focus on reproductive, maternal and child health. Quality bonuses were calculated based on facilities' performance on a detailed quality checklist, and in proportion to the quantity bonus.
What are other key features of the financing mechanism?	These types of funds require the introduction of extensive independent verification systems for results and expenditure which can absorb a significant proportion of the overall financing allocated to projects.

Mechanism 3: Public-private Investment Partnership

Archetype: The Integrated NCD-Humanitarian Response Project, Jordan

Question	Description
What is the purpose of the financing mechanism?	To support the prevention and treatment of diabetes, high blood pressure and other NCDs among Syrian refugees and vulnerable host communities in Jordan. • Health Community Clinic [HCC] Programme: 190 Ministry of Health-owned primary health care centers are supported with access to training and equipment for improved NCD care, with clinics supported to provide community outreach activities. • A 'Health Schools Programme' delivers health education to students aged 6-18 on nutrition, personal hygiene, oral hygiene, physical activity, healthy diets, drug abuse and tobacco control in 160 public schools, while a 'Youth for Health' (known as Shababna) programme trains young people to raise awareness in their communities.

	• Media, advocacy and campaign and research activities to promote the project and share recommendations to integrate NCD prevention services at the primary care level.
Where does the funding come from?	NovoNordisk Foundation; World Diabetes Foundation and the Government of Jordan. Funding is in the form of grants.
What is the size of the financing mechanism?	$5,5 million from 2020-2024
Who is responsible for managing the financing mechanism?	World Diabetes Foundation is in overall control of grant financing, in coordination and with the support of the Government of Jordan.
Who are the implementing entities for the financing mechanism?	Depending on the 'stream' of the project, the implementing agencies can be: Government or NGO-owned primary healthcare facilities, publicly-owned schools, civil society organizations.
What types and terms of financing are made available through the mechanism?	All financing is unconditional in the form of grants and paid directly to service providers. For the healthcare components, grants fund basic equipment, training of healthcare providers and improved patient records systems.
What are other key features of the financing mechanism?	This funding mechanism relied on the presence of strong country leadership and coordination capacities to identify investment opportunities with the greatest potential for impact, as well as on strong local financial management systems to allow funding to flow through existing channels to front-line service providers.

Mechanism 4: Development Impact Bond (DIB)

Archetype: ICRC's Programme for Humanitarian Impact Investment (PHII)

Question	Description
What is the purpose of the financing mechanism?	The ICRC sought to expand and improve efficiency of physical rehabilitation services. The intervention includes: three new Physical Rehabilitation Program centres in Mali (Mopti), Nigeria (Maiduguri) and the Democratic Republic of Congo (Kinshasa), as well as provision of training for local staff to deliver high quality physical rehabilitation services in these centres
Where does the funding come from?	Development Impact Bonds (DIBs) finance development programs with money from private investors who earn a return if the program is successful, paid by a third-party donor.

	For the PHII, the Investors are a mix of European institutional investors and high net worth individuals (HNWIs).[1] The outcomes payers are Governments (e.g., of Switerland, UK, Italy and Belgium) and a private bank foundation (e.g., La Caixa Foundation).
What is the size of the financing mechanism?	$28 million from 2017-2022
Who is responsible for managing the financing mechanism?	The ICRC is responsible for managing funding and channeling these to one of three locally owned and operated service providers in each country.
Who are the implementing entities for the financing mechanism?	Each centre is owned and operated by a local partner with the ICRC providing technical support for service delivery and design.
What types and terms of financing are made available through the mechanism?	Financing from the bond goes to the service providers, unconditionally, and as a return to private investors, if the service providers meet pre-agreed efficiency and quality targets.
What are other key features of the financing mechanism?	This was the first DIB to be focused on humanitarian settings.

Mechanism 5: Market-shaping Fund

Archetype: Medicines for Malaria Venture

Question	Description
What is the purpose of the financing mechanism?	Overall purpose is to treat and protect people from malaria and develop next-generation medicines that will contribute to the eradication of the disease. A three-pronged approach • Facilitating equitable access to quality antimalarials to maximize the use and health impact of existing products (near-term). • Developing better medicines for case management, including patient-adapted new combinations to overcome drug resistance, to facilitate deployment of shorter treatment courses and to protect vulnerable populations like children and pregnant women (medium-term). • Bringing forward new tools for resistance and elimination to help countries reduce transmission and ultimately become malaria free (long-term).

[1] Breakdown of investors is not made publicly available.

Where does the funding come from?	MMV receives funding and support from government agencies, private foundations, international organizations, corporate foundations and private individuals.
What is the size of the financing mechanism?	Approximately $90 million per year.
Who is responsible for managing the financing mechanism?	MMV is governed by a Board of Directors chosen for their scientific, medical and public health expertise in malaria and related fields, their research and management competence as well as their experience in business, finance and fundraising.
Who are the implementing entities for the financing mechanism?	For research and development activities: Implementing entities are bio-medical research institutions, including the private R&D arms of pharmaceutical and diagnostic companies, as well as publicly funded academic research institutions like universities. For market-shaping activities: Implementing entities can be manufacturers, private sector suppliers of select commodities in priority markets and country governments in high-burden countries
What types and terms of financing are made available through the mechanism?	These funds are used to finance MMV's portfolio of R&D projects (historically 70–80% of total expenditure), as well as specific, targeted access & product management (APM) interventions that aim to facilitate increased access to malaria medicines by vulnerable populations in disease endemic countries and support their appropriate use (historically 5–15% of total expenditure).
What are other key features of the financing mechanism?	This fund is focused mostly on addressing the 'up-stream' determinants of commodity availability – like the research pipeline and manufacturing capacity. As a result, benefits accrue in the broad and are difficult to target toward one specific population.

Mechanism 6: Seed Funding

Archetype: Grand Challenges Canada – Global Mental Health

Question	Description
What is the purpose of the financing mechanism?	To seed and transition to scale high impact innovations that support the mental health needs of underserved individuals, in particular young people, in low-and middle-income countries.
Where does the funding come from?	NIHR, UKAid, Grand Challenges Canada and Government of Canada.
What is the size of the financing mechanism?	$42.6 million since 2010

Who is responsible for managing the financing mechanism?	Grand Challenges Canada manages all grants which are provided to
Who are the implementing entities for the financing mechanism?	Broad eligibility criteria which vary across specific funding calls but includes individual innovators, private healthcare enterprises, social enterprises, other private companies and service delivery organizations
What types and terms of financing are made available through the mechanism?	A blend of: -smaller amounts of seed funding (<$100,000) to support the prototyping and testing of promising mental healthcare innovations -larger amounts of 'transition-to-scale' funding (<$1,000,000) to help enterprises with proven technologies and interventions to scale
What are other key features of the financing mechanism?	The fund is 'risk-tolerant' and willing to make high-risk, high-return investments in early-stage companies and innovations without a demonstrated pathway to scale.

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